

TECHNICAL DATA SHEET

REAFREE® 6877-T

Powder Resins / Saturated Carboxylated Polyester / Epoxy

PRODUCT APPLICATION DETAILS

Saturated carboxylated polyester suitable for the formulation of decorative and protective thermosetting tribochargeable powders in combination with epoxy resins. Reactive type.

SALES SPECIFICATIONS

| | CHARACTERISTICS | METHODS |
|------------------------------------|-----------------|-------------|
| Acid value | 70-80 mg KOH/g | ASTM D-1639 |
| Viscosity (Cone and plate - 165°C) | 7-16 Pa.s | DIN 53229 |
| Color (50%) | 3 max Gardner | ASTM D-1544 |

OTHER CHARACTERISTICS¹

| | CHARACTERISTICS | METHODS |
|-----------------------------------|-----------------|---------|
| Appearance | Pale granules | |
| Glass transition temperature (Tg) | approx 55 °C | DSC |

¹The data provided for these properties are typical values, intended only as guides, and should not be construed as sales specifications

CURING CONDITIONS

10 minutes at 170°C (object temperature)

RECOMMENDED MIXING RATIO

REAFREE® 6877-T / Epoxy: 50/50

MARKET

Coatings & Inks

- Industrial Coating
 - General Industry

PERFORMANCE BENEFITS

- Good flow for high reactive type.
- High salt spray resistance.
- Good mechanical properties.
- Good recoatability.
- Low thickness film coatings.
- Tribochargeable.

REAFREE® 6877-T

FORMULATION GUIDELINES

| STARTING FORMULATION | |
|---------------------------------|-----|
| REAFREE® 6877-T | 328 |
| Titanium Dioxide ⁽¹⁾ | 331 |
| Epoxy resins ⁽²⁾ | 328 |
| Flow modifier ⁽³⁾ | 10 |
| Benzoin | 3 |

⁽¹⁾ Kronos® 2160
⁽²⁾ Araldite® GT-7004 (Huntsman) DER™ 663 UE (Dow Chemical) Epikote® 3003 (Resolution)
⁽³⁾ Byk® 360 P (Byk Chemie)

APPLICATION / EXTRUSION CONDITIONS

| CHARACTERISTICS | |
|----------------------------------|-------------|
| Extruder | BUSS PCS-30 |
| Spraying gun | GEMA PG 1-B |
| Torque | 40 % |
| Extrusion speed | 200 rpm |
| Application voltage | 60-80 kV |
| Test substrate (Degreased steel) | 1 mm |
| Extrusion temperature | 80 °C |

COATING PROPERTIES

| | CHARACTERISTICS | METHODS |
|-----------------|-----------------|-------------|
| Film thickness | 60-80 microns | |
| Gloss (60°) | Over 90 % | |
| Cupping test | Over 8 mm | DIN 53156 |
| Direct impact | Over 80 kg.cm | ASTM D-2794 |
| Reverse impact | Over 80 kg.cm | ASTM D-2794 |
| Conical mandrel | 100 % | ASTM D-522 |
| Adhesion | Gt0 | DIN 53151 |

PRODUCT SAFETY

Please refer to the corresponding Safety Data Sheet.

DELIVERY FORM

Granules. White opaque polyethylene bags of 25 Kg. One Ton pallet shrink – wrapped.

STORAGE AND HANDLING

The resin in its original unopened bags is stable for more than three years, stored in a dry place at temperature below 30°C. Avoid direct sunlight.

| | | | |
|---|--|---|--|
| Arkema Coating Resins 410 Gregson Dr. Cary, NC 27511 – USA T +1 919 469 6700 | Arkema Química, S.A.U. Ctra. Olzinelles, s/n E-08470 Sant Celoni (BCN) Spain T +34 938 674 000 | Arkema Chemical India Private Ltd. D-43, Trans Thane Creek MIDC Industrial Area 400706 Mumbai – India T +91 22 67377122 | Headquarters: Arkema France 420, rue d'Estienne d'Orves 92705 Colombes Cedex France T +33 (0)1 49 00 80 80 |
|---|--|---|--|

Disclaimer - Please consult Arkema's disclaimer regarding the use of Arkema's products on <https://www.arkema.com/global/en/products/product-safety/disclaimer/> which is incorporated herein by reference and made a part hereof.
Arkema France, a French société anonyme registered at the Trade and Companies Register of Nanterre under the number 319 632 790